

**Testimony of Fennie Wang
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**before the House Financial Services Committee,
Subcommittee on Digital Assets, Financial Technology and Inclusion**

**Hearing titled: *Putting the ‘Stable’ in ‘Stablecoins:’ How Legislation
Will Help Stablecoins Achieve Their Promise***

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Humanity Cash Testimony to the House Financial Services Committee

Thank you Chairman McHenry, Chairman Hill, and Ranking Member Lynch and Ranking Member Waters for giving me this opportunity to testify. People like me rarely have this opportunity. I do not represent a large corporation or an industry organization. I am an independent lawyer and entrepreneur working on grassroots projects. My name is Fennie Wang and I run a small organization called Humanity Cash that works with community organizations to design local currencies that make money work harder for local communities. In my previous life, I worked as a research analyst on Wall Street, then a Wall Street lawyer before jumping into the deep end of digital currencies and start-ups. In that capacity, I have worked at a number of prominent projects, including stablecoins, where I developed my knowledge of the technology.

I. A brief introduction to existing stablecoins

Decentralized stablecoins are typically digital currency protocols that attempt to issue digital tokens with a price target of \$1 USD (or some other real world fiat currency), and achieves that target price through mechanisms that are primarily executed through smart contracts on a blockchain. Within the universe of decentralized stablecoins, there are different designs and mechanics for achieving the price target with different financial risk profiles. For example, some are called algorithmic stablecoins, whereby the stablecoin protocol uses predefined rules or algorithms to adjust its supply in response to demand in order to keep the stablecoin at its price target. For example, if the stablecoin rises above the price target, the algorithm may increase the stablecoin's supply by minting new stablecoins and removing related collateral tokens from the market. When the stablecoin falls below the price target, the algorithm may reduce supply by burning stablecoins in exchange for inflating the related collateral tokens. Oftentimes with algorithmic stablecoins, the stablecoin's supply is moderated by its relationship with a second token of fluctuating value that functions like collateral. Importantly, the second token is also issued by the same protocol; therefore its value and market behavior are endogenous to the stablecoin protocol and highly correlated with market behaviors of the stablecoin. This is inherently risky, given the highly correlated nature of the two tokens.

In contrast, other types of decentralized stablecoins are collateralized by digital assets and other digital currencies whose value are exogenous to the stablecoin protocol itself. Under these models, in order to generate one stablecoin (with a target value of \$1 USD), a user must deposit into a smart contract another digital currency of value as collateral e.g. \$1.50 worth of ETH. These protocols typically require overcollateralization due to the volatile prices of the underlying assets used as collateral. The stablecoin is collectively backed by all collateral locked into the protocol, which is a collection of different digital currencies that are approved as collateral types. A complex governance system of the stablecoin protocol is required to ensure that the price target of \$1 is met, given the varying market characteristics and price volatility of the underlying portfolio of collateral. Such a system may be considered, in some aspects, to be less risky than an

algorithmic model, where there is no collateral whose value and market dynamics are exogenous and orthogonal to the value or dynamics of the stablecoin itself. However, crypto-collateralized stablecoins still have inherent price risks, as the price target of \$1 USD is inherently asymmetrical with the value and price movement of the underlying collateral.

The only way to fundamentally reduce the price risk is to have the underlying collateral of a stablecoin match the price target e.g. one stablecoin with a price of \$1 USD is backed by one dollar (or dollar equivalent). These types of stablecoins are sometimes called centralized or custodial stablecoins because the peg mechanism is dependent on assets that are inherently off-chain and therefore not publicly verifiable in the same way that on-chain collateral may be verified. In short, the peg is dependent on the market's trust that the issuer of the stablecoin indeed has sufficient dollar assets to match the amount of stablecoins issued. Where that trust is established, primarily due to clear regulatory standards and market reputation for adhering to those standards, these types of dollar-backed stablecoins become go-to choices for transactions.

In all of the above examples, the predominant use case for the stablecoins is crypto-trading. For example, with crypto collateralized stablecoins, users are essentially borrowing against their collateral in order to generate additional liquidity in the form of stablecoins e.g. instead of having to sell ETH in order to buy another digital asset, a user can purchase the digital asset using a stablecoin that is issued against her ETH, and then when a profit is generated, she can return the stablecoin to retrieve her ETH collateral, capturing any upside value of her ETH. While a centralized dollar-backed stablecoin can be used for real world payments given its dollar reserves, these are still primarily traded on exchanges and most of its volume is still in the cryptomarkets where it is used as a dollar proxy for on-chain transactions.

However, with a clear regulatory framework, banks and other institutions will feel more confident in issuing stablecoins for payment use cases, which would have great public benefit by reducing the cost of transactions and increasing the speed of settlement. Currently, the U.S. lags behind many other countries in digital payments. For example, in the U.S. the predominant and cheapest form of payment transactions use a settlement network called the Automated Clearing House (ACH), which can take 5-6 business days for payments to fully clear. In contrast, in the European Union, the predominant payments network is the Single Euro Payments Area (SEPA), which can process payments in one business day. The difference of a few business days can make or break many small businesses that have tight working capital requirements. Therefore, laying the groundwork for regulated stablecoins for payment use cases would have enormous benefit to ordinary Americans and Main Street.

II. A short primer on community currencies

During the pandemic, I resolved to use my knowledge of blockchain and stablecoins to build non-speculative applications that could improve the lives of ordinary Americans. To understand

the role that alternative currencies can play in a non-speculative way, I studied the history of community currencies in the United States and around the world, which have existed long before the advent of Bitcoin and blockchain.

A fundamental tension of all ecosystems — whether monetary systems or blockchain ecosystems — is the balance between efficiency and resiliency. A broadly used currency is highly efficient given its breadth, yet it may be at the expense of local economies that provide resilience in the broader economic ecosystem. For example, a community that relies more on local production of food may be less susceptible to COVID supply chain issues or knock-on consequences from geopolitical events like war. The core thrust of community currencies is to restore resiliency to the monetary ecosystem by focusing on the balance of trade within localized economies, particularly those situated within a larger monetary regime. Community currencies are not legal tender, but they complement national currencies as a local medium of exchange to ensure more money recirculates and stays within local communities.

In times of crisis, community currencies, sometimes called complementary currencies, can function as an alternative source of funding to facilitate local trade and productive activity when national currency is scarce in the case of severe recessions, or as a means to organize productive activity at the local level in the absence of productive capacity at a national level. For example, when the only bank in the town of Tenino, Washington closed during the Great Depression, the local government issued a wooden currency to continue the facilitation of trade.¹ This wooden currency is still in circulation today and was utilized in the town's COVID19 relief program, which distributed \$300 a month to those with a demonstrated economic hardship to help them meet their basic needs. A similar approach was taken in post World War I Germany during the Weimar Republic with the creation of “notgeld,” an emergency scrip that was issued to combat hyperinflation and stabilize the economy.²

In the absence of a deep crisis, the role of community currencies is to create more balance in the flow of funds within regions. This is the primary space in which Humanity Cash operates. Our mission is to work with community banks, credit unions and community organizers to create locally responsive financial tools. With a broad currency, economic activity can easily flow out of a region to larger corporations headquartered elsewhere, sometimes even offshore. This dynamic is most visible on Main Street in the form of mom and pop shops that shut down because they cannot compete with big retailers.

Community currencies posit that when a currency (primarily functioning as a medium of exchange) is restricted to facilitating transactions in a particular community, this would stimulate local economic productivity. There is suggestive evidence that local currencies have a higher

¹ <https://www.strongtowns.org/journal/2020/6/29/wooden-money>

² <https://designobserver.com/feature/notgeld-emergency-money-in-inflationary-germany/39926>

velocity of money than national currencies.³ The velocity of money is a measure of how fast or how often the same dollar recirculates in the economy by facilitating multiple economic transactions. In other words, there is a multiplier effect. For every dollar injected into a community, it may create 3–4x the economic value.⁴ The initial recipient, for example, may spend that dollar at the local grocer, who then spends the same dollar at the local bakery, whose owner then spends the same dollar at the local diner before that dollar exits the community.

In addition, a key design of some community currencies is to keep underlying dollar reserves with community banks, which are critical to creating a money multiplier effect in local economies, whereby the same dollar deposited at a local bank creates more than one dollar of economic value to the local economy. When a community currency is working right, the currency is being used to facilitate multiple trades locally, creating multiples of income on the initial local dollar injected into the economy, while the underlying U.S. dollar is being reinvested into the local economy via local banks, creating additional multiplier effects.

Community currencies show how payment stablecoins can help support community banks and credit unions that are critical for financial inclusion. In the US, almost half of our deposits are kept with just 10 banks.⁵ *That is more than \$11 trillion with just 10 banks,*⁶ despite there being 4,750 community banks⁷ and 5,298 credit unions.⁸ This trend is now dangerously accelerating with the current regional banking crisis. The number of community banks has declined by 50% since 2000 due to market consolidation and competition.⁹ In total, we have lost more than two-thirds¹⁰ of our community banks since 1984 due to financial consolidation, with disproportionate impact on minority-owned banks.¹¹ The results are consequential.

Community banks are critical providers of financing for the local economy. While community banks hold only 15% of the banking industry's total loans, they hold 30% of the industry's commercial real estate loans that finance multifamily housing, retail, hospitality and industrial projects, 36% of the industry's small business loans, and 31% of farm loans.¹² More dollars held by community banks means greater liquidity for local productive activity.

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https://www.researchgate.net/figure/Figura-6-Fonte-De-la-Rosa-J-Stodder-J-On-velocity-in-several-complementary_fig4_306315018

⁴ Id.

⁵ <https://www.statista.com/statistics/727546/market-share-of-leading-banks-usa-domestic-deposits/#:~:text=Bank%20of%20America%20held%20the,bank's%20share%20exceeded%20five%20percent>.

⁶ <https://www.insiderintelligence.com/insights/largest-banks-us-list/>

⁷ <https://www.fdic.gov/resources/community-banking/cbi-study.html>

⁸ https://www.statista.com/topics/7633/credit-unions-in-the-us/#topicHeader__wrapper

⁹ <https://www.abrigo.com/blog/community-bank-outlook-challenges-and-opportunities-in-2021-and-beyond/>

¹⁰ <https://fred.stlouisfed.org/series/USNUM>

¹¹ <https://www.cnbc.com/2020/08/25/minority-entrepreneurs-at-tipping-point-as-black-owned-banks-dwindle.html>

¹² <https://www.fdic.gov/resources/community-banking/report/2020/2020-cbi-study-full.pdf>

Every local dollar creates multiplier effects



III. Digital community currency experiment

In the summer of 2020, I discovered a community currency in Berkshire County, Massachusetts, which is collateralized by federal dollars held with local community banks and, at the height of its popularity, accepted at approximately 400 local stores. The goal is to promote patronage of small businesses and local banks, creating multiplier effects on both the demand side (stimulating transactions with local businesses) and the reserve side (keeping dollars with local banks to reinvest as local productive capital). The dollar backing and convertibility between the community currency and the underlying dollar reserves enabled small business owners to obtain liquidity to pay bills in USD if necessary, and provided a clear measure of the value of each local currency note. The local currency was originally in the form of paper notes that were exchanged for U.S. dollars on a 1:1 basis.

During the pandemic, small businesses were under, and continue to be under, pressure. Moreover, the pandemic accelerated the shift towards contactless payment. All else equal, this means more money is leaking out of local economies, just when they need it the most. I believed this was an opportunity to address a real world problem that blockchain was suited for – by digitizing a local currency, we can better compete with electronic payments and reduce transaction fees to the immediate benefit of small businesses, while ensuring that the underlying dollar reserves remained deposited, and therefore invested, in the local economy via local banks.

Humanity Cash transposed the Berkshires-based local currency model into digital form; instead of swapping federal dollars for paper notes at physical bank branches, we minted tokens in exchange for federal dollars electronically deposited with two local banks. On the asset side, the community banks can redeploy the deposits back to the local community; on the liability side,

the digital tokens are exchanged within a closed loop of local businesses, creating a virtuous cycle.

An important distinction between the digital community currency we created versus other stablecoins is that by design the community currency cannot be traded on an exchange, as its purpose is to facilitate economic transactions within a region. As such, by design a community currency is a closed loop system, which also substantially reduces the risk of money laundering and other types of financial crime risks. Users could load up their digital wallets by linking a bank account, with the funds transferred to two participating local banks in the Berkshires, upon which the user would be credited an equivalent amount of digital tokens to be spent at nearly 90 participating local businesses. Those local businesses may choose to cash out if they needed the liquidity, but many business owners chose to reuse their tokens to support other local businesses and show solidarity. Because the use case profile is focused on bona fide economic activity in a local community, as opposed to trading or purely financial activities, the risk profile of a community currency is also substantially lower, with underlying deposits of higher quality. Banks are allowed to loan out higher quality deposits, which creates the money multiplier effect in local economies.

IV. Lessons learned from the digital community currency experiment

- 1. While ordinary people may or may not care about blockchain or cryptocurrency, there is an appetite and desire to use digital currency if people believe that it will benefit and strengthen their local communities.***

During the process of designing and launching the project in the Berkshires, I interviewed small business owners, community bankers and ordinary citizens. Whether in the Berkshires, or across the United States from Puerto Rico to Hawaii to Indiana, the people I've met are not interested in crypto as a speculative investment; they are deeply passionate about making money work for their communities. This includes a concrete mixer driver who spends 92 hours on the road each week, a retired accountant looking to give back, a small business owner who produces Massachusetts-made ukuleles, and community organizers who are experimenting with ways to use digital community currencies to support Black-owned businesses. There is a deep passion and appreciation for supporting local businesses, as well as trust in their community banks.

- 2. Community banks see stablecoins as an innovative deposit-gathering tool, and see blockchain technology as replacing core banking infrastructure in the next 10-15 years, enabling smaller banks to be more innovative and competitive, while continuing to serve their local communities.***

The biggest shift in attitude came from the community bankers we worked with, who went from initially skeptical about participating in a digital currency-based project to very excited about how they might participate in the future of this new financial technology. The president of one of the banks noted that he understood that blockchain technology was the future, and they needed to get ahead of the curve in order to stay competitive. Participating in a community-based project was a low-risk way for them to learn about the technology, as they would not otherwise have the budget or bandwidth to engage in research and development work. Critically, they saw how participating in the program could enable smaller banks to be more innovative in the types of products they could offer.

We believe that with the right policies — starting with this stablecoin bill — alongside continued testing, education, and maturity of the technology, we have an existentially critical opportunity to staunch the flight of deposits from community banks and credit unions. Payment stablecoins enable higher quality deposits, as we can transact amongst each other without needing to withdraw the underlying dollars. The urgency of keeping deposits local is more important than ever. With the right policies that enable community organizations to safely experiment, the technology can mature to serve as a de-monopolizing force in our highly concentrated banking industry, by enabling community banks and credit unions to cost effectively deploy new products and services that better serve their communities.

3. Blockchain provided seamless and transparent ways to enable various aspects of legal compliance, including documentation of end users for pass-through insurance

In working with our external counsel and other stakeholders, consumer protection was of paramount importance. We were thoughtful in constructing the program such that the underlying deposits would qualify for FDIC pass-through insurance, which requires, in part, that there is a clear record of outstanding obligations and balances of end users. As a digital currency with transactions recorded in real-time on the blockchain, the blockchain functions as real-time record keeping of all wallets created and the real-time balances of each wallet. At the point of wallet creation, we collected information regarding user name and contact information associated with each wallet (not available to the public on a public ledger to preserve user confidentiality). Therefore, we can seamlessly and cost-effectively meet the requirements of FDIC pass-through insurance by showing verifiable recordkeeping of outstanding users and their balances, which would serve as evidence of claims in the event of a bank bankruptcy.

The use of a blockchain ledger can also cost effectively and transparently meet part of the public reporting requirements under the proposed stablecoin bill. For example, you can show in real time the number of tokens on-chain, compared against the U.S. dollar reserve balances. With the right policy, starting with this bill, we can enable our financial system to be more competitive

and less monopolistic, and more responsive to local economies, a benefit that ordinary Americans appreciate and deeply desire.

V. Importance of the stablecoin bill

As grassroots entrepreneurs and community innovators, we need risk-appropriate regulations that will not be cost prohibitive, while providing guardrails to protect us from bad actors. The proposed stablecoin bill strikes a good balance between those two needs. Importantly, it provides space for local initiatives and innovation through state regulators, and a clear roadmap for implementation. State regulators are closer to the ground and better able to tailor and respond to the regulatory needs of local innovation. It would not make sense for local or community initiatives to be governed by a federal organization. Small projects that are trialing or piloting different aspects of community development work are more likely to qualify for state regulator sponsored sandboxes, providing those necessary guardrails while allowing ordinary citizens to learn by doing. Without an opportunity for grassroots work and community experiments, the technology will indeed remain within big banks and other large financial institutions.

The concern that state regulators would somehow be lax regulators does not take into account grassroots innovation and the principle of risk appropriate regulation, which the proposed stablecoin bill mandates. For example, grassroots projects like the one we did are closed loop (does not trade widely or on exchanges) and focused on bona fide local payments and economic transactions, as opposed to financial transactions where there is greater risk for large swings in deposit and withdrawal activity. Both of these factors substantially reduce risks to the consumer. State regulators are better positioned to provide appropriate oversight for these kinds of projects. If those early grassroots projects provide lessons that are then scaled up in subsequent projects, the regulatory requirements would also scale up in proportion, and where appropriate those stablecoin projects may become federally regulated, which the proposed stablecoin bill also provides for. This pathway provides smaller organizations that are critical to local economies with the time to safely make mistakes, pivot, or build on initial successes into larger, more viable projects, with the confidence necessary to secure additional funding to meet greater regulatory requirements. The avenue for state regulation in the proposed stablecoin bill, alongside federal regulation, is in line with our Constitution's history that supports states as "laboratories" of democracy. As Justice Brandeis wrote in 1932, "It is one of the happy incidents of the federal system that a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country."¹³ Indeed, both state and federal oversight of stablecoins can co-exist and support the other in developing a healthy financial ecosystem.

¹³ *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting).

Enabling non-bank stablecoin issuers also falls within this tradition of local “laboratories.” In the case of our project in the Berkshires, the local banks did not have the capacity to take on such a project as an issuer given their capacity restraints. However, enabling another community organization to function as the issuer allowed them to learn in a low-risk, low-resource environment. They will now have more confidence and knowledge going forward should they decide to issue their own stablecoins, or to work with other community organizations to do so. For very small banks, they may never have the resources to take on stablecoin issuance. However, a local chamber of commerce or economic development agency could issue and market a stablecoin to support regional small businesses while keeping underlying reserves with community banks, therefore still locking in the money multiplier to the benefit of the local economy.

Finally, it is important to stress that the role of government is not to decide which projects are successful and useful. Indeed, many community-based and grassroots projects will fail or fail to achieve scale. What is important is that our government ensures that Americans have the ability to experiment and to fail safely. What has deeply moved me is speaking to ordinary Americans who feel both a deep passion for their communities *and* a sense of possibility that no matter how small they are, they have the ability to use new tools to help their communities become more self-sufficient and self-reliant. Though they deeply criticize the existing financial system, they are not cynical. They believe that even if they are not immediately successful, their work can help educate their communities and build upon lessons that can ultimately be successful in ensuring that our financial system works for everyone. This is the spirit that we must preserve and support. As one small business owner told me, she loves the concept of a community currency because it forces people to stop and acknowledge the human aspects of a financial transaction. Community currency this isn’t merely another faceless financial transaction; it is an exchange between one neighbor to another.